

WHAT IS CLAIMED IS:

1. An electromechanical module, for use in testing multiple IC-modules concurrently; said module comprising:

a circuit board having a plurality of sockets mounted thereon, where each socket is structured to hold
5 one of said IC-modules;

each socket having a corresponding register on said circuit board, where each register has N data inputs and one clock input which synchronizes the storing of signals from said N data inputs into said register;

10 a bus, on said circuit board, which sends a timing pulse to said clock input on all of said registers in parallel, and concurrently sends a clock signal and N-1 test signals to said N data inputs on all of said registers; and,

15 each socket having N input terminals that are connected to N outputs on a respective set of signal translators on said circuit board, and each set of signal translators have N inputs that are connected to said N data outputs on said socket's corresponding register.

2. An electromechanical module according to claim 1 which further includes a multiplexor means, coupled between all of said signal translators and said bus, for receiving control signals from an external source and, in response, generating signals on said bus which represent the signals from a selected set of said signal translators.

3. An electromechanical module according to claim 2 wherein said multiplexor means generates digital signals on said bus.

4. An electromechanical module according to claim 2 wherein said multiplexor means generates analog signals on said bus.

5. An electromechanical module according to claim 1 wherein each particular socket on said circuit board has its own separate register on said circuit board.

6. An electromechanical module according to claim 1 wherein each particular socket on said circuit board shares its corresponding register with at least one other socket on said circuit board.

7. An electromechanical module according to claim 1 wherein each signal translator includes a single transistor and two resistors which limit the flow of current through said single transistor such that the square of said current times said two resistors is less than one-tenth of one watt.

8. An electromechanical module according to claim 7 wherein the total number of said signal translators on said circuit board is at least fifty.

9. An electromechanical module according to claim 7 wherein each of said signal translators further includes a low pass filter means for reducing voltage overshoots and voltage undershoots on said socket input terminals

10. An electromechanical module according to claim 7 wherein said single transistor is a N-channel field effect transistor.

11. An electromechanical module according to claim 7 wherein said single transistor is a P-channel field effect transistor.